



Foley, Hoag LLP

155 Seaport Blvd.

Boston, MA 02210

U.S. Patent Application Serial No.: 09/832,658

Title: Polymer Conjugates of Interferon Beta-1A and Uses

Inventor: Pepinsky et al.

Filed: April 11, 2001

Attorney Docket no.: BII-008.01

Sheet 1 of 11

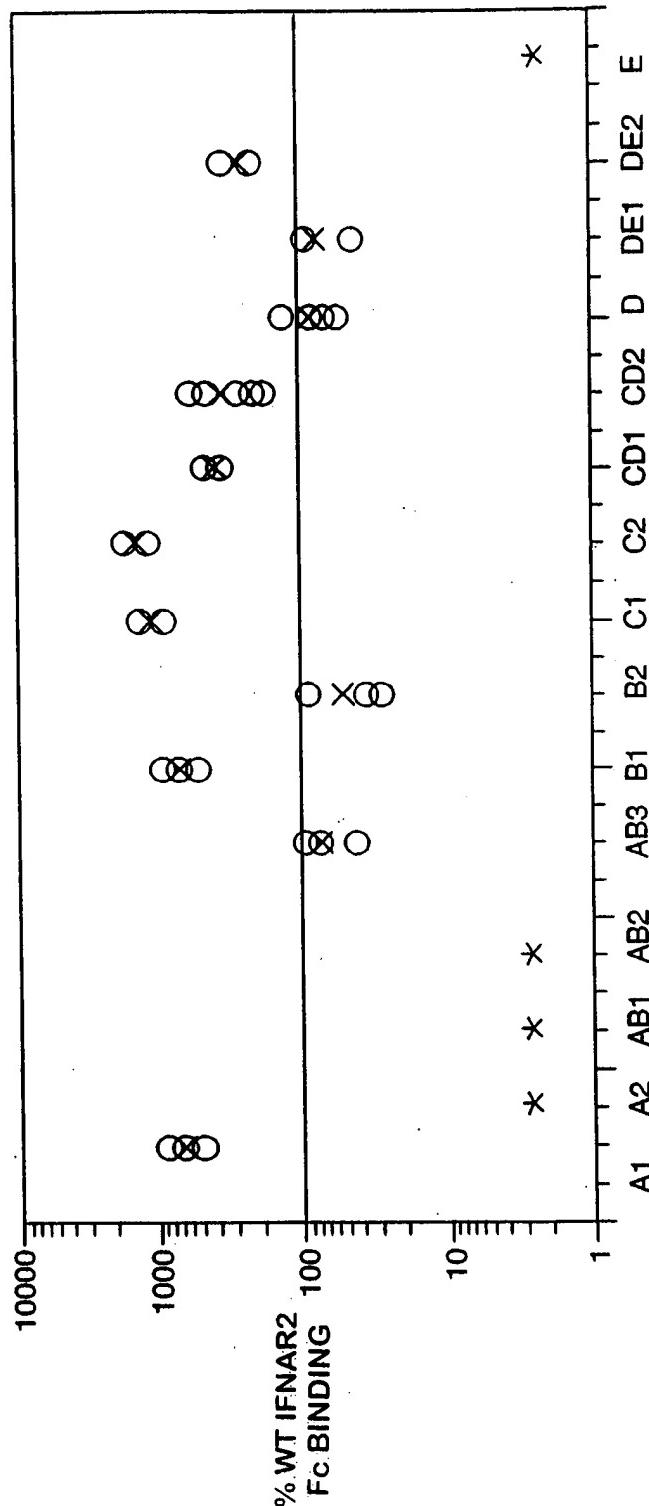


FIG. 1

DEC 29 2003
PATENT & TRADEMARK OFFICE 8835

Foley, Hoag LLP
155 Seaport Blvd.
Boston, MA 02210

U.S. Patent Application Serial No.: 09/832,658
Title: Polymer Conjugates of Interferon Beta-1A and Uses
Inventor: Pepinsky et al.
Filed: April 11, 2001
Attorney Docket no.: BII-008.01
Sheet 2 of 11

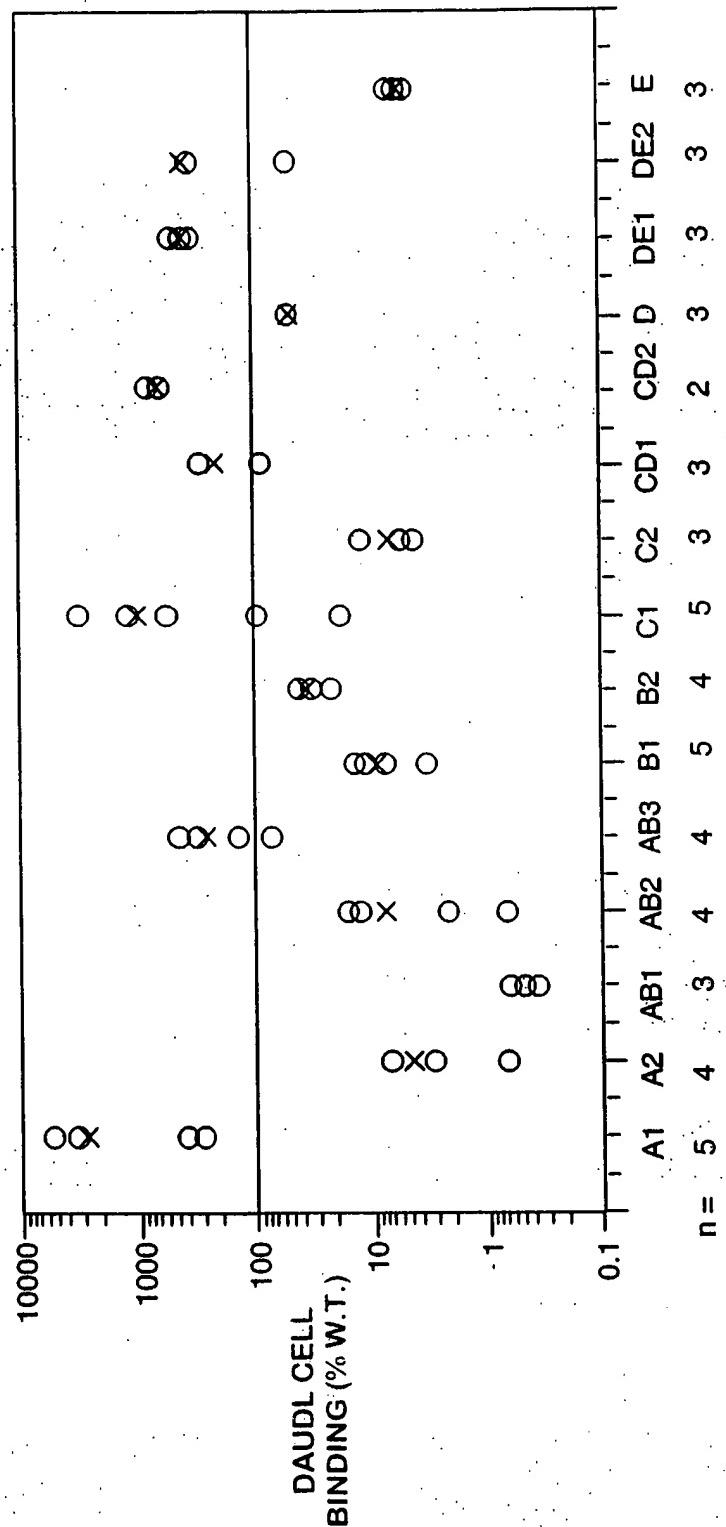


FIG. 2



Foley, Hoag LLP
155 Seaport Blvd.
Boston, MA 02210
U.S. Patent Application Serial No.: 09/832,658
Title: Polymer Conjugates of Interferon Beta-1A and Uses
Inventor: Pepinsky et al.
Filed: April 11, 2001
Attorney Docket no.: BII-008.01
Sheet 3 of 11

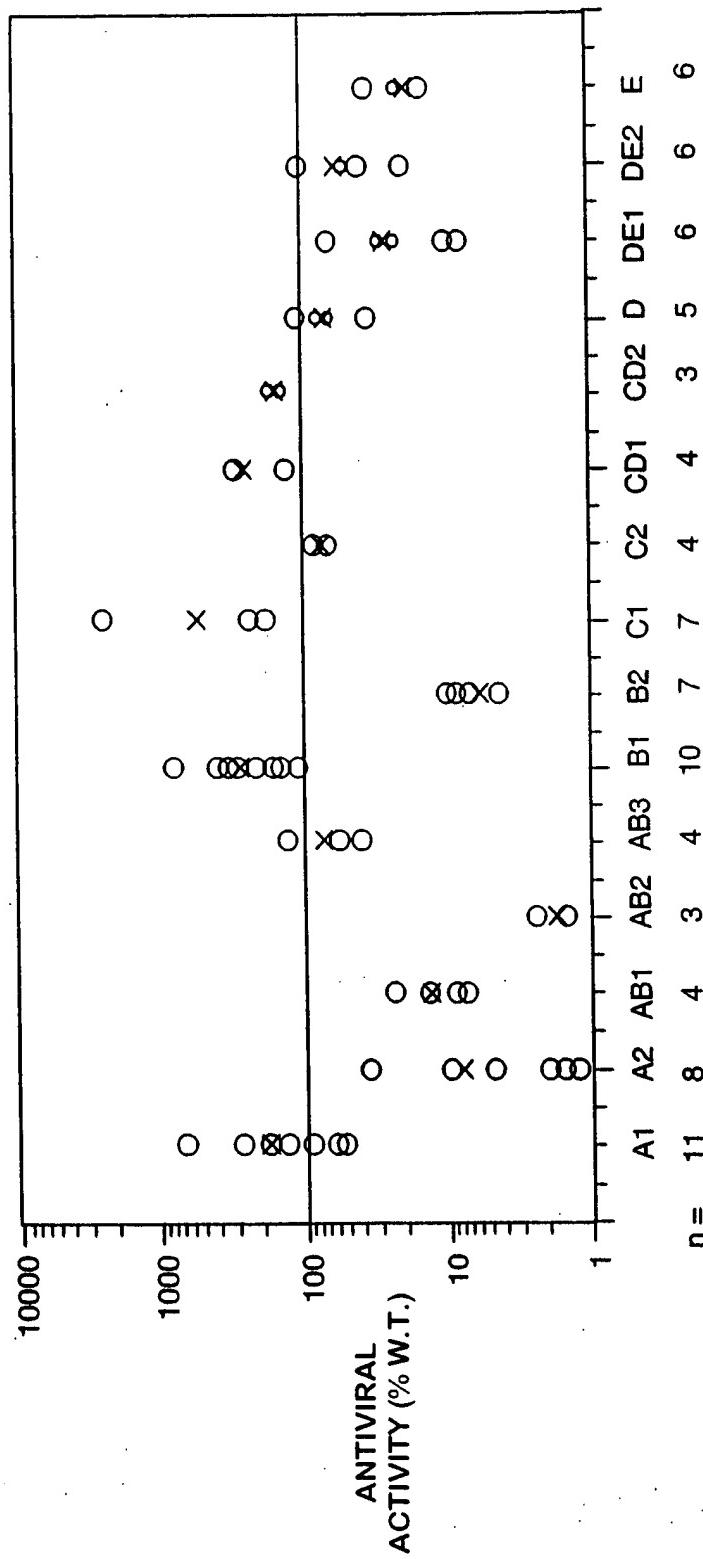


FIG. 3



Foley, Hoag LLP
155 Seaport Blvd.
Boston, MA 02210
U.S. Patent Application Serial No.: 09/832,658
Title: Polymer Conjugates of Interferon Beta-1A and Uses
Inventor: Pepinsky et al.
Filed: April 11, 2001
Attorney Docket no.: BII-008.01
Sheet 4 of 11

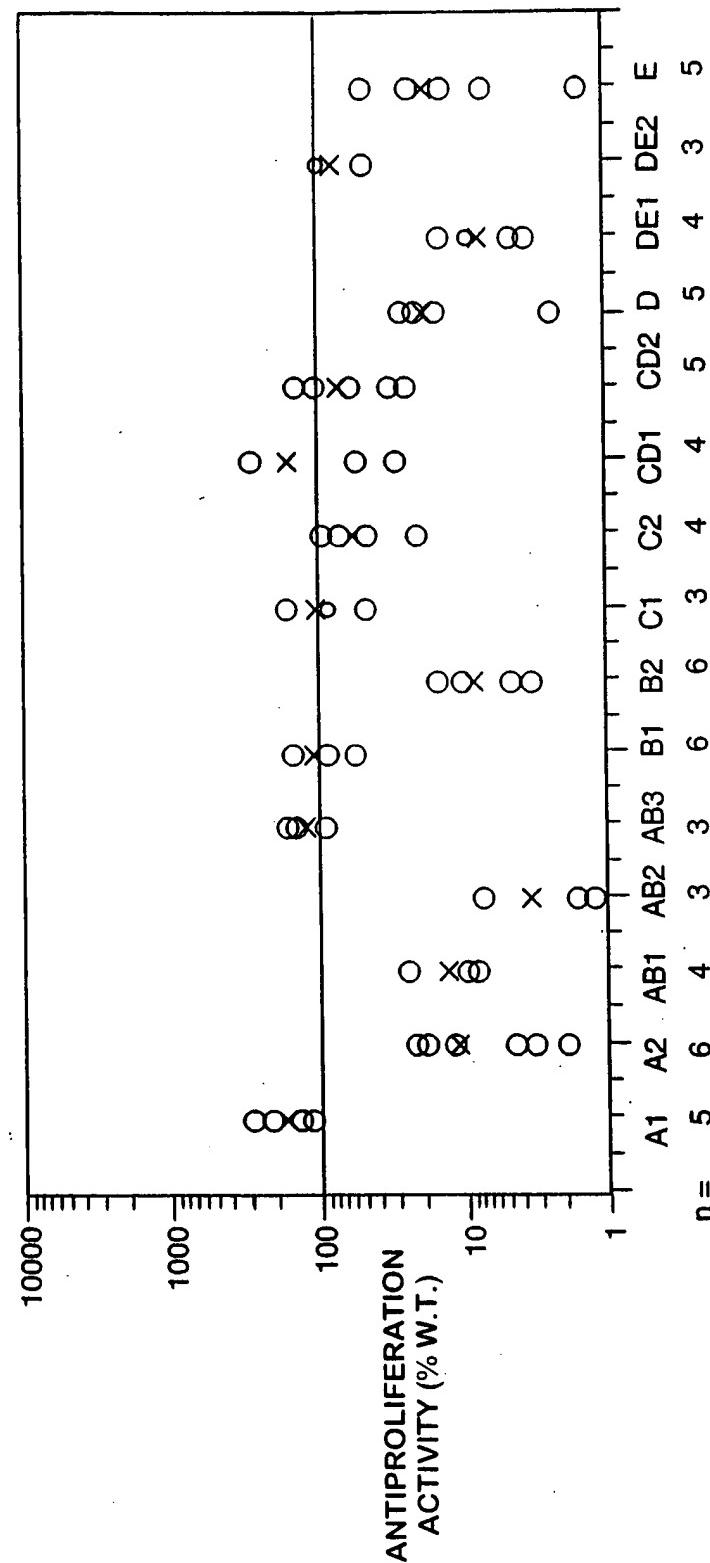


FIG. 4



Foley, Hoag LLP
155 Seaport Blvd.
Boston, MA 02210
U.S. Patent Application Serial No.: 09/832,658
Title: Polymer Conjugates of Interferon Beta-1A and Uses
Inventor: Pepinsky et al.
Filed: April 11, 2001
Attorney Docket no.: BII-008.01
Sheet 5 of 11

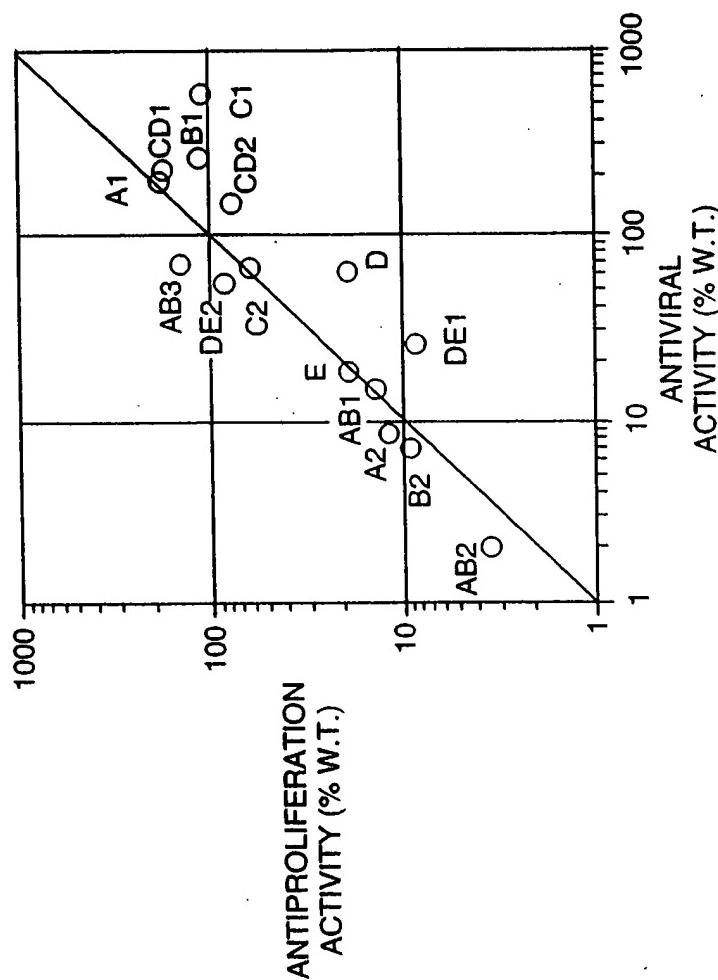


FIG. 5



Foley, Hoag LLP
155 Seaport Blvd.
Boston, MA 02210
U.S. Patent Application Serial No.: 09/832,658
Title: Polymer Conjugates of Interferon Beta-1A and Uses
Inventor: Pepinsky et al.
Filed: April 11, 2001
Attorney Docket no.: BII-008.01
Sheet 6 of 11

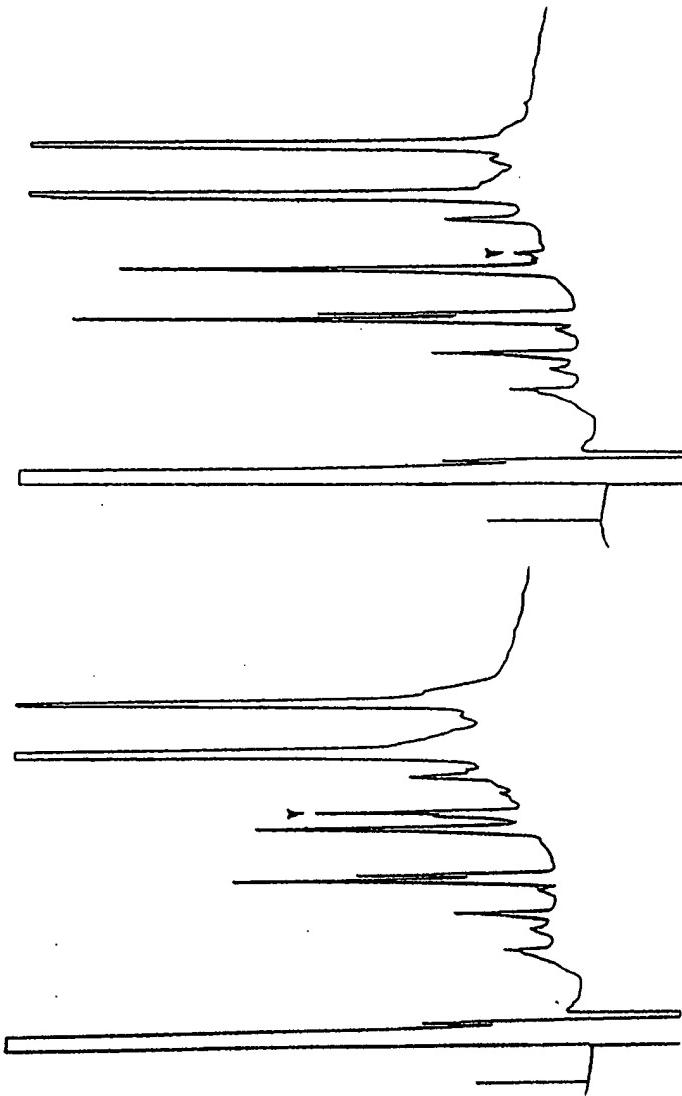


FIG. 6B

FIG. 6A



Foley, Hoag LLP
155 Seaport Blvd.
Boston, MA 02210
U.S. Patent Application Serial No.: 09/832,658
Title: Polymer Conjugates of Interferon Beta-1A and Uses
Inventor: Pepinsky et al.
Filed: April 11, 2001
Attorney Docket no.: BII-008.01
Sheet 7 of 11

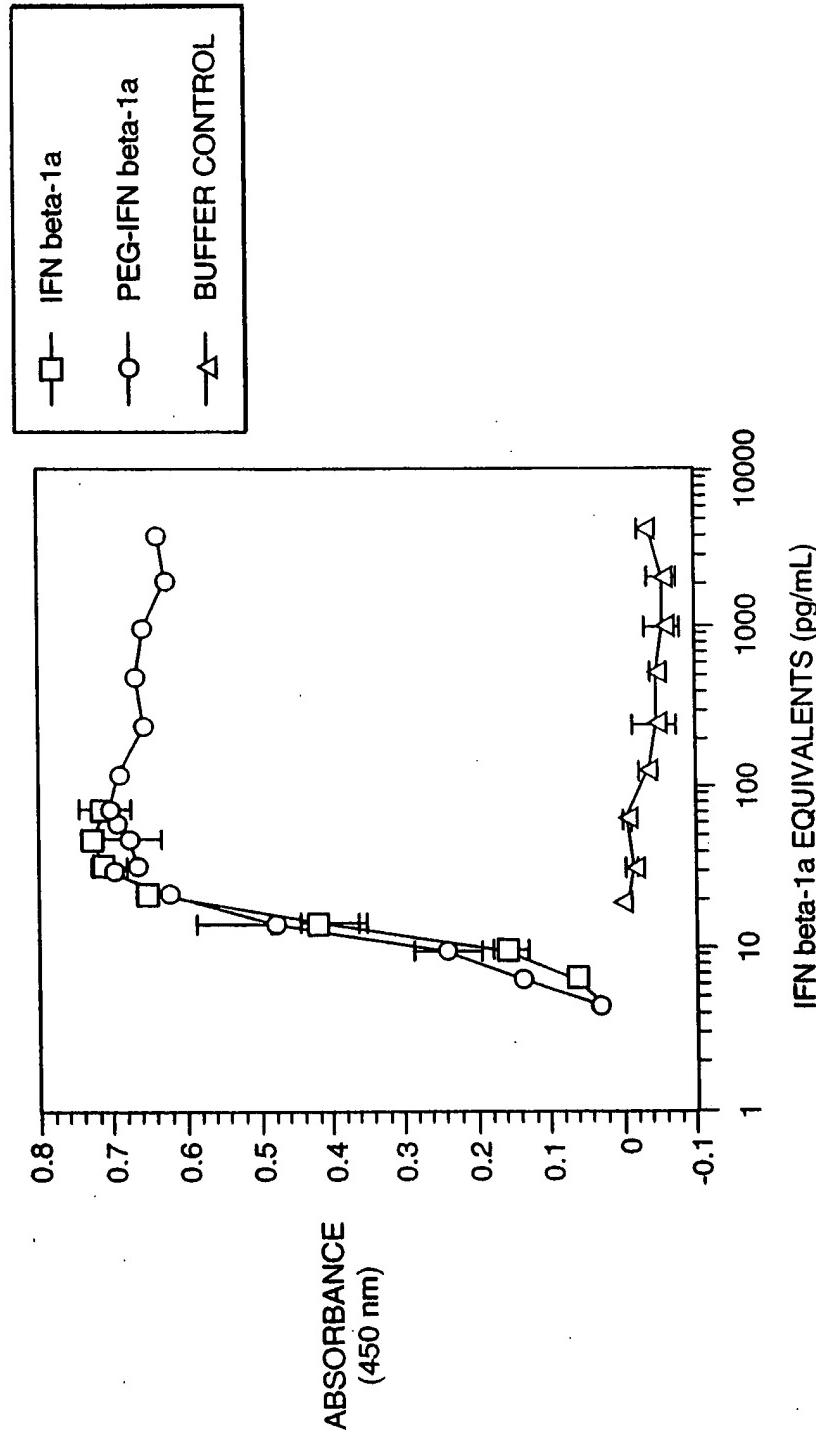


FIG. 7



Foley, Hoag LLP
155 Seaport Blvd.
Boston, MA 02210
U.S. Patent Application Serial No.: 09/832,658
Title: Polymer Conjugates of Interferon Beta-1A and Uses
Inventor: Pepinsky et al.
Filed: April 11, 2001
Attorney Docket no.: BII-008.01
Sheet 8 of 11

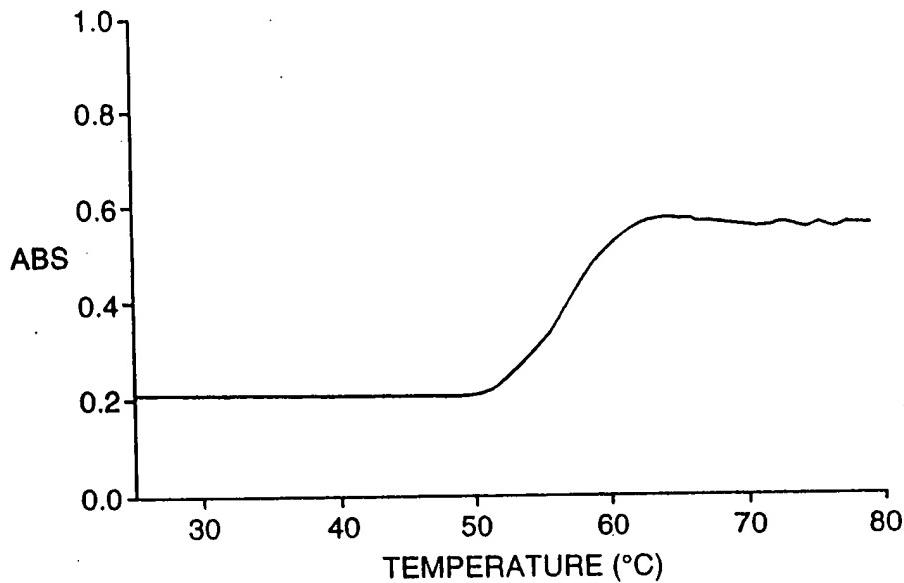


FIG. 8a

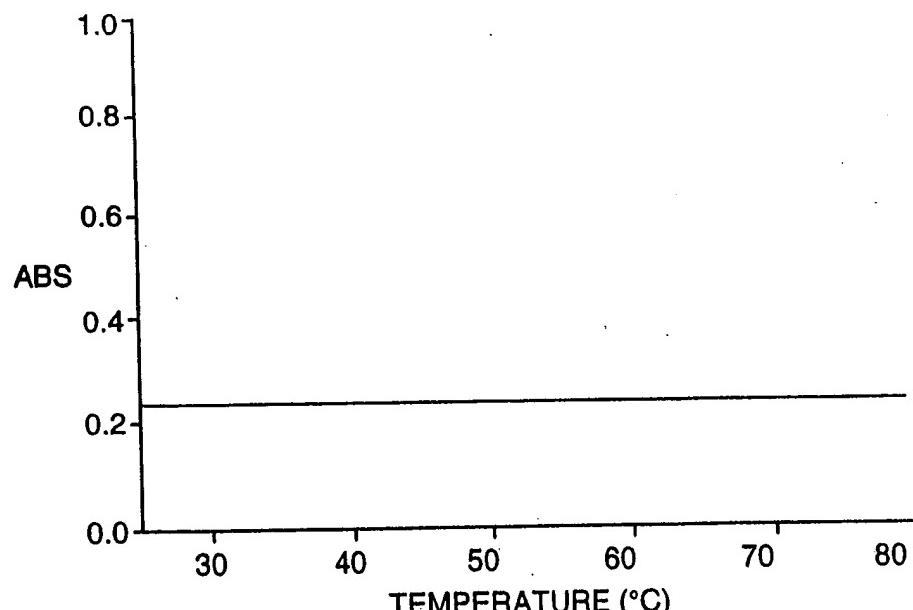


FIG. 8b



Foley, Hoag LLP
155 Seaport Blvd.
Boston, MA 02210

U.S. Patent Application Serial No.: 09/832,658
Title: Polymer Conjugates of Interferon Beta-1A and Uses
Inventor: Pepinsky et al.
Filed: April 11, 2001
Attorney Docket no.: BII-008.01
Sheet 9 of 11

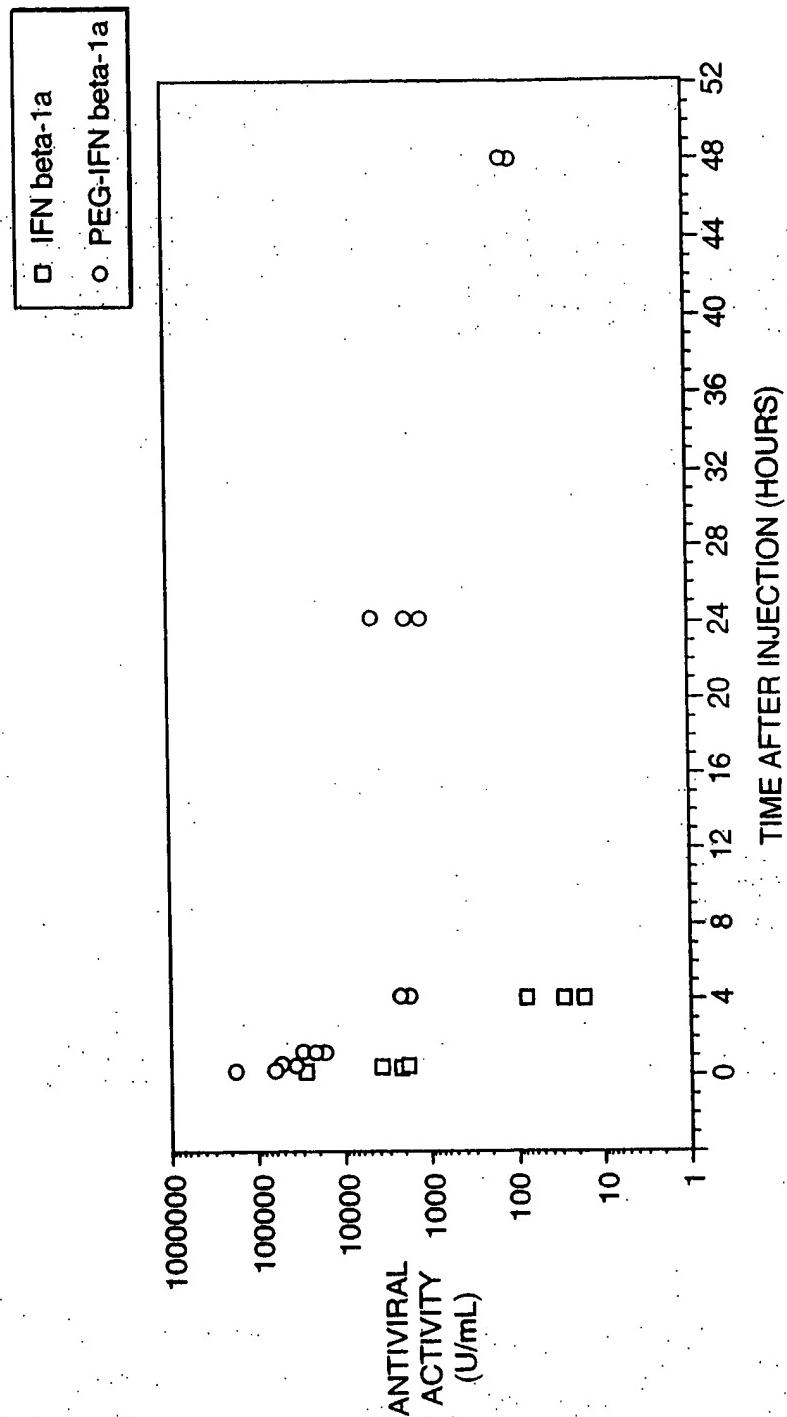


FIG. 9



Foley, Hoag LLP
155 Seaport Blvd.
Boston, MA 02210

U.S. Patent Application Serial No.: 09/832,658
Title: Polymer Conjugates of Interferon Beta-1A and Uses
Inventor: Pepinsky et al.
Filed: April 11, 2001
Attorney Docket no.: BII-008.01
Sheet 10 of 11

1 TCCGGGGGCC ATCATCATCA TCATCATAGC TCCGGAGACG ATGATGACAA GATGAGCTAC
AGGCCCCCGG TAGTAGTAGT AGTAGTATCG AGGCCTCTGC TACTACTGTT CTACTCGATG
1>Ser Gly Gly H i s H i s H i s H i s Ser Ser Gly Asp A s p Asp Asp Asp L y s Met Ser Tyr

61 AACTTGCTTG GATTCCCTACA AAGAACAGC AATTTCACT GTCAAGAGCT CCTGTGGCAA
TTGAACGAAC CTAAGGATGT TTCTTCGTCG TTAAAAGTCA CAGTCTTCGA GGACACCGTT
21>Asn Leu Leu G l y Phe Leu G l i n Arg g Ser Ser Asn Phe G l i n C y s G l i n L y s Le u Leu Trp G l i n

121 TTGAATGGGA GGCTTGAATA CTGCCTCAAG GACAGGGATGA ACTTTGACAT CCCTGAGGAG
AACTTACCCCT CCGAACTTAT GACGGAGTTC CTGTCCTACT TGAAACTGTA GGGACTCCTC
41>Leu Asn G l y A r g Leu Gl u Ty r Cys Leu L y s Asp Arg Met A s n Phe Asp I l l e Pro G l u G l u

181 ATTAAGCAGC TGCAGCAGTT CCAGAAGGAG GACGCCGCAT TGACCATCTA TGAGATGCTC
TAATTCTGTCG ACCTCGTCAA GGTCTTCCTC CTGGGGCGTA ACTGGTAGAT ACTCTACGAG
61>I l l e L y s G l i n L e u G l i n G l i n P h e G l i n L y s G l i u Asp A l a A l a L e u T h r I l l e T y r G l u M e t L e u

241 CAGAACATCT TTGCTATTTT CAGACAAGAT TCATCTAGCA CTGGCTGGAA TGAGACTATT
GTCTTGAGA AACGATAAAA GTCTGTTCTA AGTAGATCGT GACCGACCTT ACTCTGATAA
81>G l i n A s n I l l e P he A l a l l e P h e Arg G l i n A s p Ser Ser Ser T hr G l y T r p A s n G l i u T h r I l l e

301 GTTGAGAACCC TCCTGGCTAA TGTCTATCAT CAGATAAACCT ATCTGAAGAC AGTCTGGAA
CAACTCTTGG AGGACCGATT ACAGATAGTA GTCTATTGG TAGACTTCTG TCAGGACCTT
101>Val G l i u A s n L e u Leu A l a A s n V a l T y r H i s G l i n I l l e A s n H i s Leu L y s Th r V a l Leu G l i u

361 GAAAAACTGG AGAAAAGAAGA TTTCACCAGG GGAAAACTCA TGAGCAGTCT GCACCTGAAA
CTTTTGACC TCTTTCTTCT AAAGTGGTCC CCTTTTGAGT ACTCGTCAGA CGTGGACTTT
121>G l i u L y s Leu G l i u L y s G l u A s p Phe Thr Arg G l y L y s Leu M e t S e r S e r L e u H i s Leu L y s

421 AGATATTATG GGAGGATTCT GCATTACCTG AAGGCCAAGG AGTACAGTCA CTGTGCCTGG
TCTATAATAC CCTCCTAAGA CGTAATGGAC TTCCGGTTCC TCATGTCAGT GACACGGACC
141>Arg Tyr Tyr G l y Arg I l l e L e u H i s Tyr Leu L y s A l a L y s G l u T y r S e r H i s C y s A l a T r p

481 ACCATAGTCA GAGTGGAAAT CCTAAGGAAC TTTTACTTCA TTAACAGACT TACAGGTTAC
TGGTATCGT CTCACCTTTA GGATTCTTG AAAATGAAGT AATTGTCTGA ATGTCCAATG
161>Thr I l l e V a l A r g V a l G l u I l l e L e u Arg A s n Phe T y r Phe I l e A s n A r g L e u T h r G l y T y r

541 CTCCGAAAC
GAGGCTTTG
181>Leu Arg A s n

FIG. 10



Foley, Hoag LLP
155 Seaport Blvd.
Boston, MA 02210
U.S. Patent Application Serial No.: 09/832,658
Title: Polymer Conjugates of Interferon Beta-1A and Uses
Inventor: Pepinsky et al.
Filed: April 11, 2001
Attorney Docket no.: BII-008.01
Sheet 11 of 11

FIG. 11

